

A NEW SPECIES OF *SCAPHOIDEUS* FROM FORMOSA (HOMOPTERA: CICADELLIDAE)^{1,2}

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ABSTRACT: A new species of *Scaphoideus*, *S. matsumurai* n. sp. is described from Formosa. This species is compared with *S. festivus* Matsumura which it is closely related to and the name it was previously placed under. The known distribution of *S. matsumurai* n. sp. is Formosa, and that of *S. festivus* Matsumura is Japan, China, and the U.S.S.R.

DESCRIPTORS: Homoptera: Cicadellidae; *Scaphoideus festivus*, *Matsumurai* Japan, Formosa.

While checking the *Scaphoideus* type material from the Matsumura Collection it was found that the specimens from Formosa which Matsumura had placed with *S. festivus* Matsumura were not *festivus* but represented a new species. This species is described at this time and compared with *festivus* which appears to be its closest relative.

Scaphoideus matsumurai n. sp.

(Figures 1-7, 14-16)

Resembling *festivus* in general color pattern and size, differing in male genital features.

Length of male 5.0 mm. female 5.6-5.8 mm.

Color: Generally yellow to yellowish-brown. Crown with an orange band between eyes near middle, and a black line along anterior margin. Pronotum with a transverse orange band across both anterior and posterior margins. Scutellum with a transverse orange band across middle.

Male genitalia: Plates long, triangular, nearly pointed at apex. Pygofer long, narrow, rounded at apex. Styles hook-shaped, with apical end straight and sharply pointed. Connective Y-shaped with parameres fused to lateral margins of apex. Parameres long, narrowing to pointed apices; in lateral view, curving dorsally from base. Aedeagus with a broad base, a long narrow shaft with a pair of dorsally bent, flaring apical processes.

Holotype male: Formosa, Heirombi, XI-20-1906, Matsumura, in the Matsumura

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Collection, Hokkaido University, Sapporo, Japan. Allotype and paratype females: Formosa, Kanshirei, IV-15-1907, Matsumura, both in the Matsumura Collection.

Note: One other female in the British Museum, which is probably this species, is labeled "Formoso, M. Kato". This species is named in honor of Dr. S. Matsumura who in his life time published much on the leafhoppers of Japan and Formosa.

Scaphoideus festivus Matsumura

(Figures 8-13, 17-19)

Scaphoideus festivus Matsumura 1902, p. 384.

A long, narrow, brightly colored species.

Length of male 4.8-5.1 mm., female 5.4-6.0 mm.

Color: Generally yellow to yellowish-brown. Crown with a broad orange transverse band between eyes near middle, and a black line around anterior margin of crown between eyes which is expanded into a spot like area at median line. Face with three to four transverse parallel black bands below anterior margin. Pronotum with two transverse orange bands one along anterior margin, other along posterior margin. Scutellum with a transverse orange band across middle.

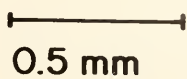
Male genitalia: Plates long, triangular, nearly pointed at apex. Pygofer long, narrow, truncate at apex. Styles hook-shaped, apex curved laterally, blunt. Connective short, broad with parameres fused to lateral margins at distal end. Parameres long, narrow near base, flaring greatly near middle, then narrowing sharply to a pointed apex. Aedeagus short, without processes, but with lateral extensions on each side for connection with internal pygofer processes.

Lectotype female: The single female specimen from Japan in Matsumura's collection (as indicated in his description of this species) is here designated the lectotype. The location of the remaining specimen or specimens, probably females, of this type series is unknown.

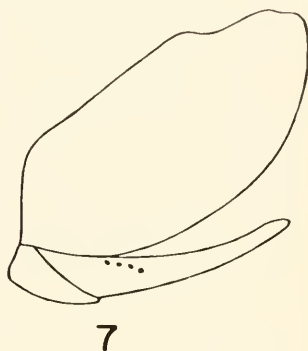
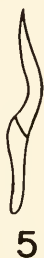
Figures 1-7. *Scaphoideus matsumurai* n. sp. Fig. 1. Lateral view of aedeagus, and terminal view of apex. Fig. 2. Ventral view of aedeagus. Fig. 3. Lateroventral view of style. Fig. 4. Ventral view of connective and parameres. Fig. 5. Lateral view of connective and parameres. Fig. 6. Ventral view of plate. Fig. 7. Lateral view of pygofer, plate and valve.

Figures 8-13. *Scaphoideus festivus* Matsumura. Fig. 8. Lateral view of aedeagus showing connection to pygofer processes. Fig. 9. Ventral view of aedeagus showing connection to pygofer processes. Fig. 10. Lateroventral view of style. Fig. 11. Ventral view of connective and parameres. Fig. 12. Ventral view of plate. Fig. 13. Lateral view of pygofer, plate, valve and anal tube.

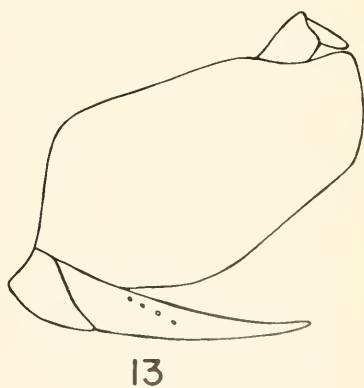
All drawn to the same scale.



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Note: Additional males and females from various parts of Japan, are in the Hokkaido University Collection, the U.S. National Museum, and the North Carolina University Collection. All these specimens were collected after this species was described, but some with the lectotype do have type labels attached. Also from RUSSIA: 1 male, 2 females, labeled "Vladivostok, 28, 8, 1965, Anufriev," in the Canadian National Collection; and from CHINA: 1 male, Suisapa, 1000 m., Lichuan Distr., W. Hupoh, VII-25-1948, Gressitt and Djou; 12 females, Mokausan, Che Kiang Pr., IX-16-28-1927, Mrs. Dora E. Wright, in the California Academy of Science; 1 male, Foochow, VII-10-14-1936, M.S. Yang, in the British Museum. All other records of this species in the literature from other countries south of the northern part of China are probably in error, and most such records should be referred to the closely related species *ornatus* Melichar (1903) which occurs throughout the Oriental Region. Evans (1966) synonymized *pristidens* Kirkaldy (1906) from Australia under *festivus* but this is undoubtedly in error.

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Figures 14-16. *Scaphoideus matsumurai* n. sp. Fig. 14. Dorsal view of head, pronotum, and scutellum of holotype. Fig. 15. Face view of holotype. Fig. 16. Face view of allotype.

Figures 17-19. *Scaphoideus festivus* Matsumura Fig. 17. Dorsal view of head, pronotum, and scutellum of lectotype. Fig. 18. Face view of male from Japan. Fig. 19. Face view of lectotype.

